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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,751	02/12/2001	Stein A. Lundby	000411	9685

23696 7590 02/10/2006

QUALCOMM, INC
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

ORGAD, EDAN

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/782,751		LUNDBY, STEIN A.	
	Examiner		Art Unit	
	Edan Orgad		2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-3 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 11/17/05 with respect to claims 4-6, 8, 9 and 11 have been fully considered but they are not persuasive.

Regarding applicants arguments with respect to claims 4-6, 8, 9 and 11, applicant argues a lack of prima facie case of obviousness. Specifically, applicant states, because Knuttson teaches power control on a downlink data channel which is different than power control over a common power control channel, there is no motivation to combine Chen's disclosure of a common channel. Examiner respectfully disagrees. Chen teaches a power control over a common channel, specifically "For reverse traffic, all sectors in the active set listen to transmissions from the wireless terminal, and preferably, for each receive slot, the best of multiple signals received by multiple sectors is selected as the receive signal. This provides a soft reverse link handoff mechanism". In other words, Chen discloses utilizing power control over a common power control channel during a soft handoff. Keeping in mind that it is well known as shown by Chen to use power control over the common power control channel during a soft handoff, one of ordinary skill in the art would find it obvious to use Chen's power control method to modify Knuttson power control scheme during a soft handoff to increase the voice capacity as suggested by Chen.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashem et al (US 6,330,456) in view of Moon et al (US 2004/0066772).

Regarding claim 1, Hashem teaches a remote station apparatus (col. 3, lines 24-26) comprising: a link quality estimation unit operative to generate a link quality estimate in response to a first power control instruction (col. 3, lines 64-67); and a power control unit coupled to the link quality estimation unit, the power control unit operative to generate a second power control instruction in response to the link quality estimate (col. 4, lines 1-35).

However, Hashem fails to specifically disclose said power control instruction is received on a common channel wherein the second power control instruction is used to adjust the transmit power of the common channel at a base station.

However, in related art, Moon discloses a shared channel structure for use in a forward link power control scheme, in other words, a power control instruction received on a common channel wherein the second power control instruction is used to adjust the transmit power of the common channel at a base station (see Moon, abstract & ¶ 0014 & 0022).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include said power control instruction to be received on a common channel with Hashem's existing power control scheme in order to reduce the space needed.

Regarding claim 2, Hashem teaches the remote station apparatus controls transmission power in response to the first power control instruction (col. 4, lines 28-32).

Regarding claim 3, Hashem teaches the remote station apparatus transmits the second power control instruction (col. 4, lines 42-47).

Regarding claim 7, Hashem teaches a method for power control in a wireless apparatus operative in a communication system having a forward link and a reverse link (col. 3, lines 64-67), the system transmitting power control bits, on a forward link channel, the method comprising: measuring a SNR of at least one power control bit for controlling a reverse link; and determining a power control decision for the forward link based on the SNR (col. 3, lines 23-30 & col. 4, lines 1-35).

However, Hashem fails to specifically disclose said power control instruction is received on a common channel wherein the second power control instruction is used to adjust the transmit power of the common channel at a base station.

However, in related art, Moon discloses a shared channel structure for use in a forward link power control scheme, in other words, a power control instruction received on a common channel wherein the second power control instruction is used to adjust the transmit power of the common channel at a base station (see Moon, abstract & ¶ 0014 & 0022):

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include said power control instruction to be received on a common channel with Hashem's existing power control scheme in order to reduce the space needed.

Claims 4-6, 8, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knutsson et al (WO 99/53630) in view of Chen et al (US 2002/0105929).

Regarding claims 4, 6 & 8, Knutsson teaches a base station apparatus (element MS) comprising: a decoder (inherent); and a determination unit coupled to the decoder, the determination operative to determine a received power control instruction for base station transmission on a channel (pg. 5, lines 25-27); and an adjustment unit coupled to the determination unit, the adjustment unit operative to adjust a transmission power level of the power control instruction (pg. 5, lines 27-29).

However, Knutsson fails to specifically disclose said power control instruction is received on a common channel.

However, in related art, Chen discloses a shared channel structure for use in a forward link power control scheme, in other words, a power control instruction received on a common channel (see Chen, abstract & ¶ 0106 & 0110).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include said power control instruction to be received on a common channel with Knutsson's existing power control scheme in order to reduce the space needed.

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Regarding claims 5 & 9, Knutsson teaches a base station apparatus (element BS) comprising: a control processor (inherent) for power control of transmission of power control instructions on a channel, wherein a transmission power level of the power control instruction is initially set to a reference value (pg. 9, lines 5-7); and an amplifier (inherent) operative to adjust a power level of the power control instructions (pg. 9, lines 1-5 & pg. 10, lines 11-15).

However, Knutsson fails to specifically disclose said power control instruction is received on a common channel.

However, in related art, Chen discloses a shared channel structure for use in a forward link power control scheme, in other words, a power control instruction received on a common channel (see Chen, abstract & ¶ 0106 & 0110).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include said power control instruction to be received on a common channel with Knutsson's existing power control scheme in order to reduce the space needed.

Regarding claim 11, Knutsson teaches a transmission power level of the power control instruction is initially set to a reference value (pg. 9, lines 5-9).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

EO 2/1/06